PTI-227B

Super I/O Card
User's Guide
Version 1.00

INTRODUCTION

The super I/O card extends the data I/O functions of the PC/AT or compatible computer with its two serial ports, one parallel port, one game port, one floppy disk drive controller and one embedded hard disk drive adapter.

The clear, well-illustrated instructions in this manual ensure that even if the user is a newcomer to the computer world, the system should have been installed and running with a minimum of effort.

FEATURES

- Compatible with IBM* PC AT/XT disk drive systems.
- Support for up to two 3½" 720K/1.44M or 5¼" 360K/1.2M floppy disk drives.
- IBM PC system address decoder.
- Support for up to two embedded hard disk drives (IDE AT bus).
- Fully programmable serial-interface characteristics:
  - 5-, 6-, 7- or 8-bit character
  - even, odd or no parity bit generation and detection
  - 1-, 1.5- or 2-stop-bit generation.
- Programmable band rate generator allowing division of any input clock by 1 to (2^{16}-1) and generating the internal 16X clock.
- Compatible with IBM printer port.
- Game port support

* IBM is the trademark of International Business Machines Corp.

CARD LAYOUT

The illustration below will familiarize the user with the layout of the super I/O card and its onboard ports.

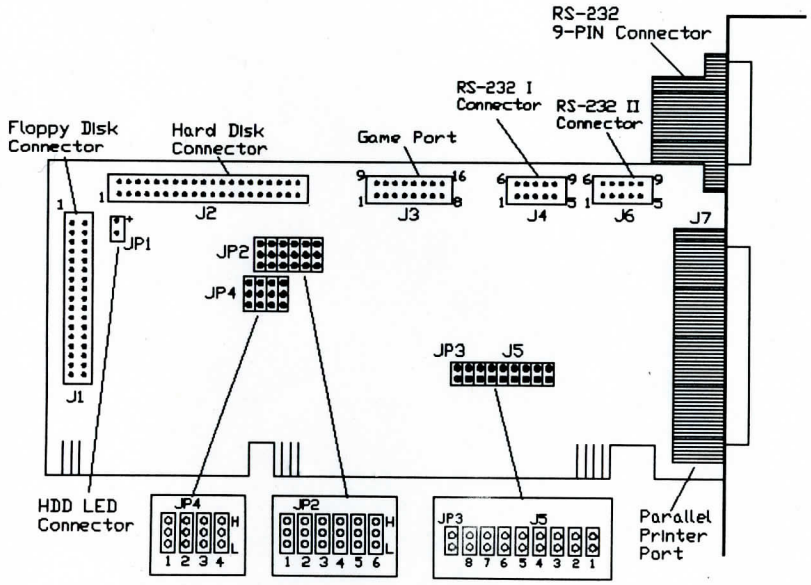

Fig 1 I/O Card Layout

JUMPERS AND CONNECTORS

The following describes the jumpers and connectors of the super I/O card.

J1 -- This is a 34-pin FDC connector.

J2 -- This is a 40-pin IDE HDD Connector.

J3 -- This is a 16-pin Joystick Connector.

J4 -- This is a 10-pin RS232-I Connector.

J5 -- This jumper selects I/O port IRQ signal to HOST as follows:

J5 (1-3)	Serial port I
3 2 1	IRQ 4 (default)
3 2 1	IRQ 3
3 2 1	IRQ 5

J5 (4-6)	Serial port II
6 5 4	IRQ 3 (default)
6 5 4	IRQ 4
6 5 4	IRQ 5

J5 (7-8)	Parallel printer port
8 7	IRQ 7 (default)
8 7	IRQ 5

Fig 2 J5 I/O Port IRQ Signals

J6 -- This is a 10-pin RS232-II Connector.

J7 -- This is a 25-pin D-type printer Connector.

JP1 -- This jumper is connected to an external LED activity indicator.

JP2 -- This jumper selects I/O port addresses as follows:

JP2(1-2)	Serial port I
H 1 2 L	COM 4 (2E8h)
H 1 2 L	COM 1 (3F8h) (default)
H 1 2 L	COM 3 (3E8h)
H 1 2 L	disable

JP2(3-4)	Serial port II
H 3 4 L	COM 3 (3E8h)
H 3 4 L	COM 2 (2F8h) (default)
H 3 4 L	COM 4 (2E8h)
H 3 4 L	disable

JP2 (5-6)	Printer port
H 5 6 L	LPT 3 (3BCh)
H 5 6 L	LPT 2 (278h)
H 5 6 L	LPT 1 (378h)
H 5 6 L	disable

Fig 3 JP2 I/O Port Addresses

JP3 -- It is shorted for enabling the printer port to be an output only port. If in case of open, it is for enabling the printer port to be an input or output port. In this case, direction is controlled by printer control register as follows:

JP4	Printer port function
	output (default)
	input

JP4 -- This jumper selects FDC/HDC port addresses as follows:

JP4-1	Hard disk address selection
1 H L	3F6-3F7, 1F0-1F7 (default)
1 H L	376-377, 170-177

JP4-2	IDE hard disk
2 H L	enable (default)
2 H L	disable

JP4-3	Floppy disk address selection
3 H L	3F0-3F7 (default)
3 H L	370-377

JP4-4	Floppy disk drive
4 H L	enable (default)
4 H L	disable

Fig 4 JP4 FDC/HDC Port Addresses